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This plan will continue to evolve. If you have any comments please send them to:

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This strategic-level New Zealand Government Plan sets out the National Security System (NSS) arrangements that will be used by senior level officials responsible for directing government agency involvement to manage the response and to recover from a Foot and Mouth Disease (FMD) outbreak.

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Foreword

griculture makes a major contribution to and in many respects, underpins New Zealand's economy.

The sector is a source of food, trade and employment and represents, for many, New Zealand's identity.

Because a Foot and Mouth Disease (FMD) outbreak could cause severe damage to all of these things, it is essential that Government has the right national-level arrangements in place to prepare for, respond to and recover from an FMD outbreak.

The New Zealand Government Foot and Mouth Disease Response and Recovery Plan (the Plan) provides information about the disease, its potential impact and prescribes the all-of-government arrangements that will be used should New Zealand suffer an FMD outbreak. Written for senior (executive-level) officials operating within the National Security System, the Plan includes arrangements that senior officials will use in the response and recovery effort.

Biosecurity New Zealand has led the development of this Plan, working in partnership with other government agencies. Biosecurity New Zealand is a business unit within the Ministry for Primary Industries, which is the agency responsible for leading the government's biosecurity responses.

During an FMD response all of our government will be busy. There will be a diverse range of issues and activities to manage and services to deliver in order to protect the economic, social, cultural, and environmental interests of New Zealanders.

The Plan sets out the coordination arrangements that government will use, and includes a planning hierarchy centred on four work-streams: Biosecurity, Economics and Trade, Welfare, and Recovery.

Defining these arrangements sets the direction for further focussed engagement and planning that each agency will do to ensure they are ready and able to fulfil their roles and responsibilities.

Government will not be responding to or recovering from FMD alone. Maori, Industry, Communities and others also all have significant roles and responsibilities. A key plank of this Plan is the readiness work that will be undertaken with these groups, to develop and implement the work-stream plans. This engagement, and the development of these plans is a priority for Biosecurity New Zealand.

It's my sincere hope that this Plan will provide reassurance to New Zealanders, industry and trading partners that New Zealand will respond effectively and put in place the right kind of recovery arrangements should an FMD outbreak occur.

Roger Smith

Head of Biosecurity New Zealand and Chief Operations Officer

Purpose

The purpose of this plan is to:

- establish the outcome the New Zealand Government will work to have, should a Foot and Mouth Disease (FMD) outbreak occur;
- set out New Zealand's National Security System (NSS) strategic level co-ordination and decision-making arrangements that will be used to manage and recover from an FMD outbreak;
- · provide important context about the disease and the potential impact of responses to the disease;
- · articulate international expectations for how the Government should respond to FMD outbreaks;
- set out each government agency's role and the part(s) of the response and/or recovery they are accountable for delivering;
- establish four operational work-streams that would be used in an FMD response (Biosecurity, Economics and Trade, Welfare, and Recovery). These work-streams will align and connect with each other;
- guide FMD readiness activities for response and recovery to ensure that this Plan can be successfully activated and implemented, if required.

FMD readiness activities

The adoption of this plan sets the direction for readiness work (the FMD Readiness Programme) co-ordinated by Biosecurity New Zealand. The FMD Readiness Programme is a vehicle for government agencies, industry and others to work together to develop more detailed arrangements (including work-stream plans), to develop and test material to support decision making, and identify how existing arrangements, processes and legal mechanisms (including the use of powers) connect together and will be used in the event of an FMD outbreak. This work will consider and, to the extent possible, detail how the response will transition to recovery (including by seeking to embed potential indicators and trigger points within work-stream plans).

Users of this plan

This plan is intended for use by those operating in New Zealand Government's NSS including:

- · Officials' Committee for Domestic and External Security Co-ordination (ODESC);
- · External Relations and Security Committee (ERS);
- Watch Group (senior officials¹);
- Senior personnel working in the FMD response (Biosecurity New Zealand is the default lead agency for an FMD response²);
- Senior officials from other supporting government agencies.

Agencies are responsible for ensuring they are ready

Agencies have an individual responsibility to ensure that they are ready and able to participate, when required, in a response to or recovery from an FMD outbreak. To that end, agencies are strongly encouraged through this Plan to participate in FMD readiness activities.

Scope

Emergency management in New Zealand encompasses reduction, readiness, response and recovery. This Plan covers the arrangements and activities relating to readiness, response and recovery. This plan does not include the New Zealand Government's arrangements for FMD risk reduction, nor does it consider how greater resilience to FMD is promoted and managed.³

An FMD response will be managed using the Co-ordinated Incident Management System (CIMS). The principles, structures and functions of CIMS are well embedded in the NSS and are used by government agencies when undertaking national-level responses.

¹ As described on page 22 of this Plan.

² As per Appendix 1 of the National Civil Defence Emergency Management Plan 2015. Note Biosecurity New Zealand is a business unit within the Ministry for Primary Industries (MPI).

³ Reduction efforts are managed using a range of pre-border activities (designed to keep FMD out of New Zealand) and post-border activities (including surveillance) designed to detect it should it ever occur. Disaster resilience, including for an FMD outbreak, is being advanced through a number of initiatives, including Biosecurity 2025 and improvements to New Zealand's Civil Defence Emergency Management framework.

FMD response and recovery outcome

In responding to and recovering from an FMD outbreak, the New Zealand Government will seek to protect New Zealand's macro-economic security and manage the socio-economic impacts on New Zealand communities.

New Zealand relies heavily on agricultural trade for its macro-economic security. To achieve the FMD response and recovery outcome, New Zealand will stamp out (eradicate) the disease and reclaim FMD-free status, in order to rebuild trade.

S tamping out⁴ the disease will impact New Zealand communities, businesses and people. Response decision makers will account for and manage potential impacts, including impacts caused by the response. This means decision makers will need to make explicit tradeoffs between disease management, returning to trade, community wellbeing and recovery. Biosecurity, trade, welfare and recovery objectives are included later in this paper, to assist decision makers in considering how to achieve the outcome (and identify any areas where trade-offs may be required). Biosecurity New Zealand will provide decision support material to help decision-makers in their work.

The outcome will be achieved using a two-pronged approach:

- implement immediate prescribed activities (that must happen regardless of the nature of the outbreak);
- assess and make strategic level decisions to match the response context.



⁴ Stamping out is a recognised and proven strategy for rapid elimination of an introduced exotic disease or other emergency livestock disease. The crucial elements of stamping out are:

designation of infected zones;

intensive disease surveillance to identify infected premises and dangerous-contact premises or villages within these zones;

imposition of quarantine and livestock movement restrictions;

immediate slaughter of all susceptible animals either on the infected and dangerouscontact premises or in the whole infected area;

safe disposal of their carcasses and other potentially infected materials;

disinfection and cleaning of infected premises;

maintaining these premises depopulated of susceptible animals for a suitable period.
 Source: FAO Animal Health Manual No 12. "Manual on Procedures for Disease Eradication by Stamping Out".

Why is FMD a concern?

FMD is the most significant economic disease risk to world trade in animal products. FMD is the single biggest threat to New Zealand's livestock industries. New Zealand trades on its FMD-free status as a condition of entry for most of its major meat and meat product export markets. Whilst the likelihood of an FMD outbreak occurring in New Zealand is considered to be low (due to our robust biosecurity protections and our relative geographical isolation), the consequences of an outbreak would be severe. This is due to the economic, environmental and social impacts that the disease, and the response to the disease, would cause.

The likelihood of an FMD outbreak is considered low (due to New Zealand's geographic isolation and biosecurity measures). However, the consequences of an outbreak would be severe. Modelling suggests the economic impact of FMD would be nearly twice that of the 2010–12 Canterbury earthquakes. The 2001 UK FMD outbreak (2000 confirmed infected animals) saw 10 million animals culled to stamp out the disease (an estimated cost of UK£10 billion).

ew Zealand's economic security is strongly connected to the agriculture sector. To illustrate:

- Primary sector export revenue was \$38.1 billion for the year ended June 2017 (including \$14.6 billion for dairy and \$8.4 billion for meat and wool).
- New Zealand exports meat and has meat trading relationships with more than 120 countries.
- In 2016, there were 6.5 million dairy cattle, 27.58 million sheep, 3.47 million beef cattle and 850,000 deer in New Zealand⁵.
- In 2014, the dairy, meat and wool sectors directly employed 127,000 people. In Waikato, Taranaki, Horizons, West Coast and Southland regions, around 10 percent of the workforce was employed in these sectors.⁶

⁵ Source: Beef and Lamb New Zealand Compendium of Farm Facts, 2017.

⁶ Regional Studies, Ministry for Primary Industries 2015.

A severe economic impact on New Zealand

Modelling of an FMD outbreak (on 500 North Island farms)⁷ predicts the following first-year impacts:

Table 1: Key macroeconomic and other sector results in first year of an FMD outbreak

Impact area	Percent change from baseline	Comment
Exchange rate	-20.2	
Private consumption	-12.2	
Investment	-4.6	Decreased investment in affected industries.
Government consumption	3.1	\$1.2 billion spent on eradication and some \$31 million compensation for farm owners.
Exports (volumes)	-12.6	Meat and dairy exports drop by \$14.4 billion as trading partners ban product.
Imports (volumes)	-9.5	The exchange rate is unfavourable (costs of imports rise) and disposable income is less.
GDP (volumes)	-7.8	
Terms of trade	-4.0	
Employment	-5.0	100,000 jobs lost mainly in agriculture and processing, or wage drops and reduced hours. On-farm employment falling by 23 percent (dairy), 21 percent (meat), and processing by 87 percent (dairy) and 79 percent (meat).
Other sectors		
International tourism	-3.81	Visitor numbers fall initially but those who visit will tend to spend more due to favourable currency exchange rates.
Manufacturing sector	12.8	Increase due to favourable currency exchange rate for exports and cheaper inputs.
Supermarkets (spending)	-10.4	Due to reduced incomes as household disposable income decreases.

Note: Modelling assumed an initial drop, but that visitors delayed rather than cancelled visits so there was some "bounce-back".

⁷ NZIER (2014) Economic effects of a foot and mouth disease incursion in New Zealand. NZIER Wellington.

Widespread impacts on New Zealand communities

Flow-on impacts vary by sector, depending on how close they are to the primary sector, and how influenced they are by the exchange rate. A 20 percent drop in the exchange rate could, for example, lead to possible increased international tourism (after an initial drop in the number of arrivals and spending) and improve returns for other export goods.

Communities will be deeply disrupted, from mental health and social cohesion to income and employment, the impacts will be widespread and significant. Starting with directly affected rural communities, disruptions will cascade throughout other communities, sectors, industries and environments to become widespread across New Zealand. Some communities will no longer function or exist in the way they did before the outbreak.

Those on affected properties will face immediate disruption via animal movement controls (such as requirements to clean vehicles and clothing) that will complicate daily life. This could make it difficult for people to socialise, get to work, access services and for children to get to and from school, affecting their education. Compounding these disruptions could be: guilt of having the disease on farm, anger and grief around loss of livelihood and destruction of animals, uncertainty about the future, and increased social isolation.

Those on neighbouring properties or with FMD-susceptible animals will face uncertainty and anxiety, while having to continue to feed and manage livestock that cannot be on-sold during the outbreak (or that may need to be destroyed). In the UK FMD 2001 outbreak, this group suffered acutely8 because they were not entitled to compensation.9 The extended period of disruption until markets are restored will also cause frustration and ongoing uncertainty.

Those reliant on the livestock sector (e.g. suppliers, processors) or from the income generated to support their business (local businesses) will be affected (e.g. via unemployment, loss of income and businesses closing). Some may find work opportunities to support the response and recovery. People may move out of affected districts in search of work, affecting schooling, access to health services, local businesses and community functioning. These consequences will cause wider significant economic impacts on the New Zealand economy including a significant economic downturn. People movement may also lead to skill shortages while businesses try to rebuild or re-establish after the outbreak is over.

FMD will also exacerbate pre-existing stressors, such as (pre-existing) health conditions, debt and relationship problems and wider social issues. Children are particularly susceptible to ongoing trauma. Animal welfare issues are likely to escalate. For others, the response to FMD, such as destroying healthy animals and the disposal of animal carcasses, will be abhorrent and could lead to protests or reduced demand for New Zealand products. There may be damage to the New Zealand reputation and brand as a result and, consequently, national economic impacts.

The UK outbreak experience resulted in considerable social protest and anger toward the Government, resulting in significantly strained relationships and an erosion of trust between communities and the Government. A similar response in New Zealand could cause a significant security issue here.

FMD is not a human health concern

FMD is NOT a human health concern. Humans, only rarely, can suffer a mild infection from direct contact via skin wounds or the mouth lining. There is no issue with food safety. It is safe to consume meat and dairy products from FMD-infected animals. However, there is likely to be a perceived health risk by consumers, leading to anxiety and psycho-social issues that will need to be addressed.

⁸ Haskins, C (2001) Rural Recovery after Foot-and-Mouth Disease. Department for Environment, Food & Rural Affairs: London.

⁹ Within New Zealand, affected farmers can make a claim for compensation where the exercise of legal powers (under the Biosecurity Act 1993) has caused them a verifiable loss. Compensation may be paid to people who have incurred a verifiable loss as a result of directions they are given pursuant to the Biosecurity Act to stamp out FMD. Farmers that are directed to have animals culled, or their farm operations restricted under movement controls, may be eligible for compensation.

How this plan connects with other plans

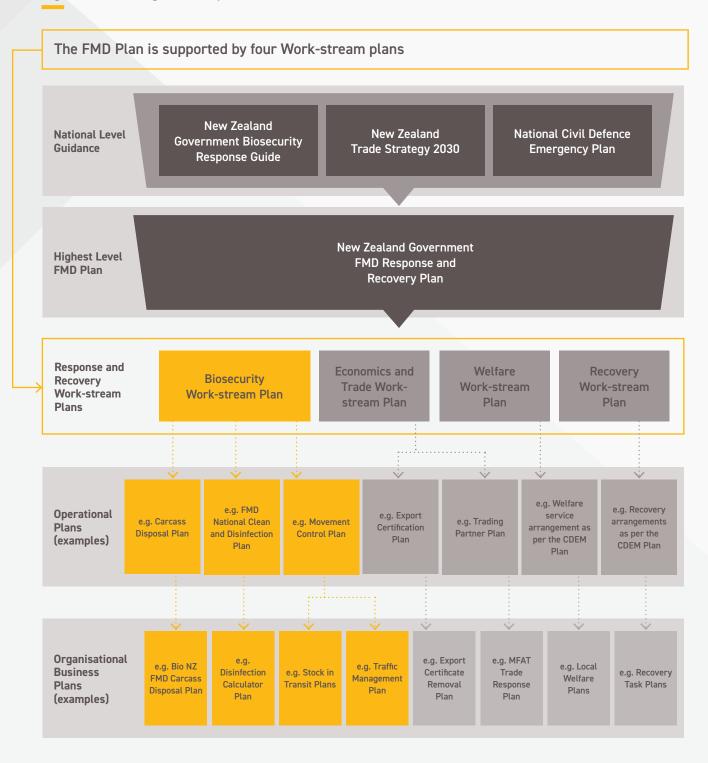
his Plan is the New Zealand Government's highest level plan for responding to and recovering from an FMD outbreak. This Plan sits within a hierarchy (Figure 1) of other plans and arrangements, at strategic, operational and tactical levels. Each layer of planning fits together to ensure those using the plan can identify what they will be working on. It will also ensure they have access to the right type of information they need to do their jobs.

This Plan should be read in conjunction with the arrangements shown, including:

- · those set out in the National Security System Handbook;
- · the New Zealand Government Biosecurity Response Guide;
- the National Civil Defence Emergency Management Plan Order 2015 (known as the National CDEM Plan) and its Guide;
- · New Zealand's Trade Strategy 2030; and
- those set out in the Biosecurity 2025 Strategic Direction Statement.



Figure 1: Planning hierarchy for FMD:



CDEM = civil defence and emergency management. FMD = foot and mouth disease.

MFAT = Ministry of Foreign Affairs and Trade.

Bio NZ = Biosecurity New Zealand, a business unit within the Ministry for Primary Industries (MPI).

Figure 2: The FMD Plan is supported by our operational plans

This plan is supported by four work-stream plans that set out more detailed arrangements.

New Zealand Government
FMD Response and
Recovery Plan

FMD Biosecurity Plan

Driving a biosecurity work-stream focusing on the disease management and other associated aspects (including biosecurity compensation). FMD Economics and Trade Plan

Driving an economics and trade work-stream.

FMD Welfare Plan

Driving a welfare workstream focusing on providing for the needs of affected communities during the outbreak. FMD Recovery Plan

Driving a recovery work-stream focusing on regenerating and enhancing the community and ensuring recovery arrangements, including transitional arrangements, are in place and implemented during and after an FMD response.

Each work-stream plan is further supported by operational plans setting out operational tasks required to deliver a successful response and recovery. This cascade of plans is the overall approach to the New Zealand FMD response and recovery effort.

As described in the "FMD readiness activities" section of this plan, the work-stream and operational plans, and the arrangements and processes that connect with and support them are developed by agencies, industry and others. Work-stream plans include planning maps to show how plans, processes and structures fit together, and potential indicators and trigger points for transitioning from response activities to recovery activities.

What the Government will do if there is an FMD outbreak

Many of the actions the New Zealand Government will take to stamp out FMD are prescribed in advance of the response. However, the nature and extent of the outbreak (and how long the disease was in New Zealand before detection) will be important considerations for strategiclevel response and recovery decision making.

A (real or suspected) FMD outbreak requires an extremely rapid (within an hour) response. The response period will likely be long (greater than a year) with recovery from the consequences continuing for many years to decades. There will be extensive pressure and focus on the New Zealand Government to manage the response and recovery in a way that meets New Zealand public, industry and trading partner expectations.

To plan for this, the Government will use a mixture of immediate prescribed activities for at least the first 72 hours to contain the disease, while assessing the situation, making strategic-level decisions and planning.

Immediate prescribed activities - things needing to happen immediately

New Zealand's approach within the first 72 hours of an outbreak is geared toward stamping out the disease to enable New Zealand to return to being declared free of FMD (for trade purposes) as soon as possible. The first 72 hours, and how New Zealand manages the response, will be observed by our trading partner countries to assess how competently we respond.

To ensure we sequence our actions appropriately, and no important steps are left out, a first 72 hour initial action plan is attached (Appendix 1). These actions are summarised in Table 2.



Table 2: Action plan of immediate prescribed activities

Co-ordinate:	A whole-of-government response to FMD is put in place and initiated immediately using this plan, and the four work-stream plans that support it (biosecurity, economic and trade, welfare, and recovery).				
Notify:	The World Organisation for Animal Health (OIE) and international markets are notified of the loss of our FMD-free status, and trade in FMD susceptible animal products is suspended.				
Communicate:	National and regional briefings of officials and key stakeholders.				
Control movement:	A National Livestock Movement Standstill* is declared, prohibiting the movement of all animals susceptible to FMD, as well as their semen and embryos. Checkpoints, road blocks, decontamination stations, compliance patrols and livestock movement bans are set up, with help from police, and local and regional councils.				
Designate areas and zones:	Controlled Area Notices are issued to control the movement of stock and risk goods and to quarantine and inspect animals within infected and high-risk zones.				
Raise public awareness:	New Zealand media and the public are briefed and frequently updated, and a public awareness campaign is launched to help people understand what to do (for example, follow movement controls), the consequences and risks of not doing what is required, and where to seek help to cope with the impact of FMD.				
Investigation, surveillance and tracing:	Intensive investigation and tracing of all livestock and risk goods movements on and off infected properties is carried out to identify other potential sites with FMD.				
Slaughter and dispose of stock:	FMD susceptible stock on infected farms (where positive cases of FMD have been confirmed) and, possibly, on farms assessed as likely to have been exposed to the virus, are humanely destroyed and disposed of.				
Decontaminate:	Whole-scale decontamination of sites, vehicles and other high-risk items is carried out.				

Note: *A National Livestock Movement Standstill is an essential tool for combating the spread of FMD. Once declared, there will be a nationwide prohibition on the movement of all stock that could potentially carry FMD. The National Livestock Movement Standstill will remain in place until decided otherwise.

Strategic-level assessment and decision making

While immediate prescribed activities are carried out, a multi-disciplinary Strategic-level Advisory Group (StAG), established by Biosecurity New Zealand, will assess the outbreak and identify strategic options and recommendations for decision makers. Strategic decisions will then drive planning and measures used for the remainder of the response and subsequent recovery.

The StAG will include the best experts available (e.g. animal health, disease, economists, banking, legal, policy, trade, farming and meat industry, health, environmental, cultural, welfare and recovery experts). Using their collective expertise, data, information and resources, these experts will provide advice for strategic decision makers. Guidance will include strategic-level situational awareness, and assessment and recommendations regarding strategic questions as set out in Table 3.

Table 3: Strategic question checklist

Strategic question area	Mandated agency*		
How will the biosecurity measures be deployed to stamp out the FMD outbreak, particularly:	Biosecurity New Zealand		
• the size of the area that will be restricted and the duration of those restrictions;			
• the nature and duration of the livestock standstill;			
• the destruction and disposal of infected and potentially infected animals;			
• if the Government will use a vaccinate-to-live or vaccinate-to-die approach?			
How will the response and recovery efforts protect New Zealand's economy and financial systems from the macro-economic fallout felt from the FMD outbreak?	Treasury and Reserve Bank		
How will the Government finance and resource the response and recovery efforts. How will the Government account for and ensure prudent expenditure?	Treasury		
What level of delegation, including financial delegations, can be handed down to those running the operational aspects of the response?	Treasury		
Should a whole-of-government multi-agency welfare framework be stood up?	Biosecurity New Zealand, all		
 How will communities be protected during the response and recovery, including what services will be used to protect the community? 	agencies working as part of the National Adverse Events Committee and the National Welfare Co-ordination Group		
How will communities be supported during the response and recovery, including what welfare services will be used to assist the community?			
How will relationships and the reputation of the Government be managed and maintained with New Zealand public, Māori and industry?	All agencies		
How will the response protect New Zealand's international reputation, including its relationships with trading partners, with other governments and with international multilateral organisations to which New Zealand is a member or party?	MFAT and Biosecurity New Zealand		
Is existing legislation and policy sufficient to manage the response and recovery, or is any bespoke legislation or policy (urgently) required?	Biosecurity New Zealand, Ministry of Civil Defence &		
For instance, what extraordinary powers might be needed in response and recovery? Are these available in existing legislation?	Emergency Management, SS and Justice		
Who can access these powers?			
Key recovery-related questions include:	Biosecurity New Zealand,		
What functions will be needed to manage the recovery, what level of co-ordination is needed and how should this be organised?	Ministry of Civil Defence and Emergency Management, Treasury, SSC, Ministry of		
• Is a bespoke governance arrangement required at the national level (e.g. a new agency or dedicated office)? Is legislation or additional funding required to effect this (relates to the question in the row above).	Social Development plus all other key agencies		
How will the transition from response to recovery be managed?			

Note: *Biosecurity New Zealand is a business unit within the Ministry for Primary Industries (MPI). MFAT = Ministry of Foreign Affairs and Trade; SSC = State Services Commission.

Advice provided by the StAG to decision makers will clearly set out the cost, benefits, risks and opportunities, and the potential impacts (including the economic, environmental, social, built and cultural impact) of any options identified.

The StAG will be provided with pre-prepared decision support/resource material to aid in its assessment and deliberations. A set of pre-identified objectives for each of the work-streams is included in Table 4. The StAG will consider these objectives when preparing strategic advice to decision makers, and if necessary make recommendations about any changes or trade-offs needing to be made to the objectives for each work-stream.



Objectives for each work-stream

Table 4: Objectives for each work-stream

	Confirm the strain of virus and the extent of the outbreak.				
Biosecurity work-stream					
objectives	Contain the disease by stopping further spread.				
	Stamp out the virus where it occurs as quickly as possible.				
	 Withdrawal of official export certification for animals and animal products that are no longer accurate. 				
	 Communicate and provide information on the outbreak and response to all New Zealand trade posts and industry stakeholders. 				
Economic and trade work-stream objectives	 Notify importing countries of risk goods that may have been exported over the risk period. 				
	· Negotiate appropriate certification requirements with trading partners.				
	· Restore or rebuild trade as soon as possible.				
	 Protection of New Zealand's economy and financial systems. 				
	Establish the welfare function as part of the Biosecurity New Zealand's FMD response structure.				
	• Quickly get effective and co-ordinated welfare assistance to those who need it.				
Welfare work-stream objectives	 Carry out activities that minimise the consequences for individuals, families and whānau, and communities. 				
	 Identify, communicate, secure and maintain the capability required to deliver welfare services for the duration of an outbreak. 				
	Collaborate with the response to minimise the escalation of the consequences of the outbreak.				
	 Regenerate and enhance the social, psychological, economic, cultural and physical wellbeing of individuals and communities, and the economic, built and natural environments that support wellbeing. 				
Recovery work-stream objectives	 Take practicable opportunities to adapt to meet the future needs of the community. 				
	Reduce future exposure to hazards and their associated risks.				
	Support the resumption of essential community functions.				
	 Plan for short-, medium- and long-term recovery, including identifying, communicating, securing and maintaining the capability required to deliver recovery for the duration of an outbreak and recovery phase. 				

How the Government will respond

New Zealand's National Security System will drive any FMD response because:

- · it will be large-scale or severe;
- · there are potentially severe national-level economic and social consequences;
- · of the size and duration of investment required to respond and recover from the outbreak (and the response);
- · of the challenge of managing New Zealand's (and the New Zealand Government's) reputation and relationships.

An urgent all-of-government response to stamp out and recover from FMD is essential due to:

- · major trade and subsequent severe economic implications for New Zealand if FMD is found (or suspected);
- · the impact that FMD has on animal health and production;
- · the rapid spread of the virus;
- · the impact on and consequences for communities and the environment;
- · the impact on farmers and their families.

The NSS has a defined way of working to manage national crisis responses.

The NSS operates at three levels during a crisis response:

- · ministers (External Relations Security Committee), led by the Deputy Prime Minister;
- · chief executives (The Officials' Committee for Domestic and External Security Co-ordination (ODESC)), led by the Chief Executive of the Department of the Prime Minister and Cabinet DPMC;
- · officials (Watch and Specialist Groups), led by the Deputy Chief Executive; Security and Intelligence, DPMC.

External Relations and Security Committee

The External Relations and Security Committee (ERS), chaired by the Deputy Prime Minister, will co-ordinate and direct how the New Zealand Government responds to FMD, and has delegated power to carry out urgent actions, which may be necessary given the rapid pace of an unfolding FMD event. The additional Ministers needed in an FMD response to cover key relevant portfolios could include: Agriculture, Biosecurity, Civil Defence and Social Development.

Officials Committee for **Domestic and External Security** Co-ordination (ODESC)

The Officials' Committee for Domestic and External Security Co-ordination (ODESC) is a committee of chief executives of government ministries and departments, which manages New Zealand's national security in governance and response. ODESC provides strategic direction and coordinates all-of-government responses. Chaired by DPMC, ODESC will, in the case of an FMD outbreak, meet and provide:

- · all-of-government co-ordination at the Chief Executive level of the issues being managed through and after the FMD outbreak;
- · strategic advice on priorities and mitigations of risks beyond lead agency control;
- support to ensure resources and capabilities required are available to deliver the FMD Response and Recovery Outcome;
- linkages at the political level, including for decisions about strategic policy, drafting of legislation, the authorisation of resources or any other decisions that sit within Ministers' ambits of control;
- · policy oversight and advice to the Prime Minister, External Relations and Security Committee, Cabinet and (as appropriate) any coalition partners in accordance with any agreement(s) in force.

ODESC will take advice from the Watch Group, the Lead Agency and the ODESC members around the table. Members will apply their collective judgement and experience in assessing the high-level strategic implications of the FMD outbreak, New Zealand's response to the outbreak, and agree on response and recovery options.

FMD Watch Group

In the event an FMD outbreak is confirmed, and the National Security System is activated, an FMD Watch Group will be called by the Department of the Prime Minister and Cabinet (DPMC). The group will:

- · obtain situational clarity about the outbreak, who is affected, the actual and potential impacts of the outbreak and the response itself;
- ensure effective systems are in place to assess and manage complex issues, including the severity of the response and any trade-offs required between response objectives;
- · focus on issues in the national interest, such as the macro-economic and socio-economic impacts of the outbreak and the response, relationship and reputational issues, and the management of expectations and perceptions, including of New Zealand's trading partners and the New Zealand public;
- · ensure all risks have been identified and are being managed, identify any gaps and areas of outstanding concern, and agree on any further action required.

The Watch Group will be expected to meet daily, to fulfil its duties, and provide advice to Officials Committee for Domestic and External Security Co-ordination, or direction to the response, as needed.

The Watch Group will include senior representatives from:

- · The Department of the Prime Minister and Cabinet
- · Ministry of Foreign Affairs and Trade
- · New Zealand Police
- · Ministry of Health
- · Ministry of Business, Innovation and Employment
- · Ministry for the Environment
- · Biosecurity New Zealand (part of MPI)
- · Ministry of Civil Defence and Emergency Management (part of DPMC)
- New Zealand Defence Force
- **Ministry of Social Development**
- · The New Zealand Treasury
- · Other agencies as required



Strategic-level Advisory Group

In order for the National Security System (NSS) to be properly informed, a multi-disciplinary Strategic-level Advisory Group (StAG) will be established as soon as the National Security System is activated. The StAG's role will be to make a strategic-level assessment of the outbreak and how the response is progressing, and provide integrated strategic advice and options to inform strategic level decision making. Participation in the StAG will be guided by the StAG Terms of Reference, role card and readiness material prepared for the StAG including: assessments and other information to help in preparing advice for decision makers.

A key consideration of the StAG will be to outline the cost, benefits, risks and opportunities that potential response measures or response considerations may have over the short, medium and long term. This assessment and advice must be holistic and consider economic, social, natural, cultural and built environments. For this reason, the StAG will be multi-disciplinary and include the New Zealand's Government's leading experts in economics, banking, trade, legal, social, environmental, infrastructural, cultural and farming areas. Experts must be able to access data and information from their own discipline and synergise it across the StAG, to provide a collective assessment of options and impacts.

Lead agency

Biosecurity New Zealand* is the government agency that leads biosecurity responses and recoveries on behalf of the New Zealand Government. Biosecurity New Zealand has specific expertise in: organism management¹⁰ (including diseases in a biosecurity response setting), compensation under the Biosecurity Act 1993, and the technical aspects of our trading markets.

This Plan and the Biosecurity Response Guide reflect the leadership role Biosecurity New Zealand plays for biosecurity responses using the National Security System, as per the National Civil Defence and Emergency Management Plan. Biosecurity New Zealand will be the agency responsible for leading an FMD response within the NSS. Biosecurity New Zealand will also work with other agencies to ensure response roles are filled by individuals with the right skills, expertise and mandate (for example, ensuring the right people are involved in the StAG and response decision-making processes). Whilst Biosecurity New Zealand is the lead agency for this response, other support agencies will play leadership roles within work-streams (see below).

Support agencies

Other government agencies will manage, coordinate and/or lead areas where they have specific technical expertise, resources, mandate and responsibilities. Some agencies will play a leadership role for aspects, or all, of a work-stream, supported by other agencies. Agency roles, high level accountabilities and workstreams are set out in Table 3. Work-stream plans articulate these responsibilities in further detail.

Note: *Biosecurity New Zealand is a business unit within the Ministry for Primary Industries (MPI).

¹⁰ Because an FMD outbreak would be an Animal Health Emergency, Biosecurity New Zealand would engage with our international partners with whom we have agreements and arrangements (e.g. the Animal Health Quadrilateral Agreement between Australia, Canada, the United Kingdom and the United States of America) to seek their expertise to assist in the response and recovery effort.

Table 5: Government Agency Roles

Agency name	Role in an all-of-government biosecurity response	FMD Work-stream		
Department of Conservation (DOC)				
Department of Internal Affairs (Local Government)	Facilitates and assists co-ordinating local government engagement in the response and recovery effort.	Biosecurity, Welfare & Recovery		
Department of the Prime Minister and Cabinet	Facilitates, leads and coordinates the use of the national security system in its practical application.	All four as required		
Environmental Protection Authority	Monitor biosecurity issues, with a particular consideration for environmental protection, and enhancing New Zealanders' way of life and economy. Could provide advice about the relationship between New Zealand's unique environment, culture and relationships with tangata whenua. Likely role in biosecurity and welfare and recovery.	Biosecurity, Welfare & Recovery		
Fire and Emergency New Zealand	Protect and preserve life, prevent or limit injury, and prevent or limit damage to property, land and the environment. Also will play a role in reducing the consequences of FMD by helping communities respond and become more resilient.	Biosecurity & Recovery		
Immigration New Zealand	Protecting New Zealand's border and facilitating immigration, including by expediting immigration for expert resources that may be a requirement of the response or recovery.	Biosecurity, Welfare & Recovery		
Inland Revenue	Involved in recovery function, including tax assistance to those affected.	Welfare & Recovery		
Ministry of Business, Innovation and Employment	Focus on business, housing (temporary accommodation), construction, and infrastructure.	Welfare & Recovery		
Ministry of Civil Defence and Emergency Management	Provide advice and co-ordinates the civil defence and emergency management aspects of the response at the national level, and supports response at the regional and local levels. May lead the national level co-ordination of welfare components of the response, and support regional and local co-ordination and delivery, depending on the situation. Advise on recovery and manage transition period if in place.	Welfare & Recovery		
Ministry of Culture and Heritage	Advises the Government on arts, culture, heritage, sport and recreation, and broadcasting. The Ministry administers the Heritage New Zealand Pouhere Taonga Act 2014 and the Protected Objects Act 1975.	Biosecurity, Welfare & Recovery		
Ministry of Education	Ensure the safety and wellbeing (including the emotional and psychological wellbeing) of children and young people and education staff with the aim of returning to normal school operations as quickly as possible.	Welfare & Recovery		
Ministry for the Environment	Advise on processes to establish environmental impacts and resource management implications	Biosecurity & Recovery		

Agency name	Role in an all-of-government biosecurity response	FMD Work-stream
Ministry of Foreign Affairs and Trade	Preserve trade markets and bilateral relationships. Work with governments regarding foreign nationals impacted by events.	Economics and Trade & Recovery
Ministry of Health	Advise on and manage human health aspects of the response, where applicable, including leading the provision of specialist psychosocial support and mental health services.	Biosecurity, Welfare & Recovery
Ministry of Social Development	Provide employment, income support and superannuation services; funding to community service providers; social policy and advice to government; and student allowances and loans	Welfare & Recovery
Ministry of Transport	Activate and coordinate the Transport Response Team (TRT), whose role is to facilitate the flow of information throughout the transport sector (including land, sea and air), and to provide strategic advice and recommendations on transport-related issues.	Biosecurity & Recovery
Oranga Tamariki– Ministry for Children	Care and protection services for children and young people.	Welfare & Recovery
New Zealand Defence Force	Provide operational and logistical support to the response. They can provide a "national reserve" to be called on where appropriate. May be authorised to perform any public service, or provide assistance to the civil power in time of emergency.	Biosecurity & Recovery
New Zealand Police	Community safety and control in the affected area. Police powers may be needed to support field operations in the areas impacted by the response, such as road cordons and property warrants.	Biosecurity, Welfare & Recovery
Reserve Bank	Monitor and provide analysis of potential and actual economic and financial impacts.	Economics and Trade & Recovery
Regional Councils and Territorial Authorities	Provide regional and local leadership for pest management and civil defence emergency management and have specialised staff in these areas. Regional councils and territorial authorities also have strong connections to iwi and local communities and can assist with local communications.	Biosecurity, Welfare & Recovery
Te Puni Kōkiri	Communicate and co-ordinate with Māori communities and meet their needs.	Biosecurity, Welfare & Recovery
New Zealand Customs Service	The identification and control of imports and exports and facilitating the lawful movement of travellers and goods across the border.	Biosecurity, Economics and Trade & Recovery
The Treasury	Advise on financial, economic and regulatory issues.	Trade & Recovery

Response activation

- iosecurity New Zealand, as the agency leading biosecurity responses*, will activate the response by:
- beginning to implement this plan and the plans that support it;
- asking the Governor-General to declare a Biosecurity Emergency under Section 144 of the Biosecurity Act 1993, enabling emergency powers aimed at the eradication of FMD from New Zealand;
- · activating the NSS;
- implementing the whole-of-government response framework for national emergencies;
- standing up a control structure to run the response, consistent with the Co-ordinated Incident Management System (known as CIMS);

- activating the delivery of welfare services in accordance with the National Civil Defence Emergency Management Plan;
- initiating government assistance measures, in accordance with the Primary Sector Recovery Policy (FMD will be classed as a large-scale event);
- beginning to co-ordinate delivery of other measures deemed necessary to help mitigate the impact of FMD on New Zealand.



Note: *Biosecurity New Zealand is a business unit within the Ministry for Primary Industries (MPI).

Response co-ordination arrangements

n an all-of-government FMD response, each workstream is the responsibility of a dedicated team. Teams are aligned with each work-stream, as follows:

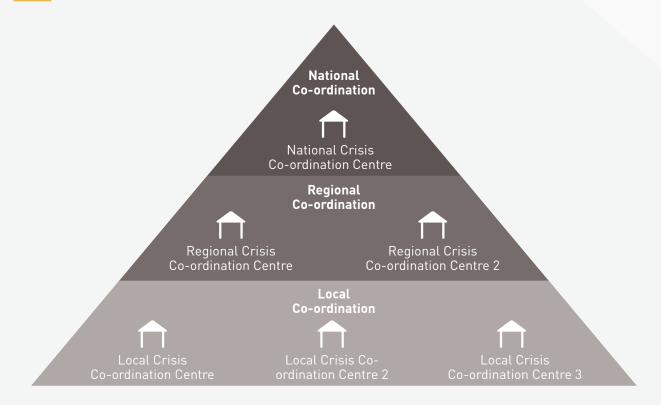
- · Biosecurity Response Team;
- · Trade Response Team;
- · Recovery and Welfare Team.

In terms of function, the National Co-ordination Centre will both manage the hazard response and recovery, and also the all-of-government co-ordination (that a National Crisis Management Centre would do) across response and recovery.

An all-of-government FMD response and recovery will use specific technical expertise and existing groups and arrangements that are in place at local and regional level CDEM. This could include Rural Advisory Groups, regional Welfare Co-ordination Groups, Local Welfare Committees, and established recovery committees/groups, local and regional CDEM personnel.

Given the scale of FMD, it is highly likely the National Crisis Co-ordination Centre will have one or several regional crisis co-ordination centres reporting to it, with each regional centre potentially also having one or several local co-ordination centres reporting to it (e.g. Figure 3).

Figure 3: National, regional and local co-ordination works together



Each team (Biosecurity, Economic and Trade, Welfare, and Recovery teams) will operate at the national level, and may operate at regional and local levels (depending on the nature of the outbreak).

The response will use CIMS functions, as dictated by the nature of the outbreak, and the needs of the different locations in which the response is being run. CIMS structures will be set out in work-stream plans.

The scale of an FMD outbreak dictates it may be necessary to have control and leadership functions established at all levels of the response. For example, there will be a national controller who will be supported by regional leaders and local leaders (dependent on a regional or local co-ordination centre being set up).

There may also be a need to establish leaders within co-ordination centres to direct each of the three workstreams. For example, there may be a biosecurity, economic and trade, welfare and recovery leader established at national, regional and local levels. These work-stream leaders may be located at the same control centre, and maybe report to an overall co-ordination centre controller. Clear management and reporting lines will be established using this structural approach.

NCC Controller

The overall national co-ordination centre controller's (NCC Controller's) role is to ensure all three response teams are aligned to deliver the overall response outcomes.

The NCC Controller is also responsible for:

- · day-to-day management of the overall response;
- keeping decision makers informed and ensuring co-ordination centres have up-to-date information;
- preparing an overall response action plan and ensuring detailed plans (including responsibilities and targets) are developed by and approved for each co-ordination centre;
- managing resource requirements for the response; risks and opportunities; the resolution of response issues; the scope of the response and controlling changes; and the interface between the Biosecurity, Recovery and Welfare, and Trade work-stream teams.

The Biosecurity Response Team

Leadership across the biosecurity work-stream will be the responsibility of Biosecurity New Zealand with technical support being provided by other government agencies.

The Biosecurity Response Team is responsible for:

- providing advice about disease management including: the strain of the virus; the virus distribution; identifying how the virus entered New Zealand; movement controls to contain the virus; what needs to be done to stamp out of the virus, including killing herds and the disposal of carcasses;
- providing advice about, facilitating and processing compensation claims under the Biosecurity Act 1993.

Note the Biosecurity Response Team will include Government Industry Agreement for Biosecurity and Response (GIA) Partners,¹¹ who will be involved in providing advice, and decision making, consistent with any FMD GIA Operational Agreement made pursuant to the GIA Deed. More information about GIA can be found at www.gia.org.nz.

¹¹ For more information about the Government Industry Agreement for Biosecurity Readiness and Response please refer to: www.gia.org.nz.

The Economic and Trade Response Team

Biosecurity New Zealand, the Ministry of Foreign Affairs and Trade, and the Treasury will provide leadership across the Economic and Trade Response Team with technical support being provided by other government agencies.

The Economic and Trade Response Team is responsible for:

- · providing advice about international and domestic economic and trade issues;
- providing information and assurance for use with New Zealand's domestic consumers regarding food safety issues;
- maintaining appropriate national and international market access and trade relations;
- · co-ordinating actions relating to market notifications, market access, product tracing, recall and control;
- · identifying species and products affected and determining impact on exports, domestic trade and food safety and public health;
- issuing required domestic and international notifications relating to products, including processing industry;
- · determining and implementing holds or withdrawals of certification and requirements for trace-back, holds and recall of product(s);
- · developing and implementing measures (as needed) to mitigate impacts on New Zealand's financial systems.

The Welfare Team

The Welfare function¹² is co-ordinated at the national level by the National Welfare Co-ordination Group led by a National Welfare Manager appointed by the Director CDEM. Nine interactive welfare services sub-functions, each led by a responsible agency with support agencies contributing, operate at national and regional levels. Regional CDEM Groups appoint Group Welfare Managers to oversee delivery of welfare services at the regional and local level. Locally established primary and rural clusters (if established in a region) may also assist with on ground co-ordination.

The Welfare function in the response transitions to the Social Recovery team in recovery, but national and regional recovery teams covering the built, economic and natural environments may be established to plan and manage recovery, including residual impacts arising from response decisions, for example, land contamination caused by carcass disposal.

The Recovery Team

The Ministry of Civil Defence and Emergency Management has an appointed National Recovery Manager under the Civil Defence Emergency Management Act 2002 who has a legislative mandate to use powers available under a National Transition Period, which can complement the powers available under the Biosecurity Act.

Ministers may determine that a bespoke governance arrangement, such as (but not limited to) a National Recovery Office (or a separate Recovery Agency) will be set up at the national level to lead the recovery, fulfilling governance functions and overseeing the co-ordination of agencies and regional authorities to support recovery. including that of people and their communities that are negatively affected by the disease and the response itself. It is assumed that a position would be established consequently to manage the recovery at the national level.

¹² Set out in Section 14, National Civil Defence Emergency Management Plan http://www. civildefence.govt.nz/assets/guide-to-the-national-cdem-plan/Guide-to-the-National-CDEM-Plan-2015-Section-14.pdf.

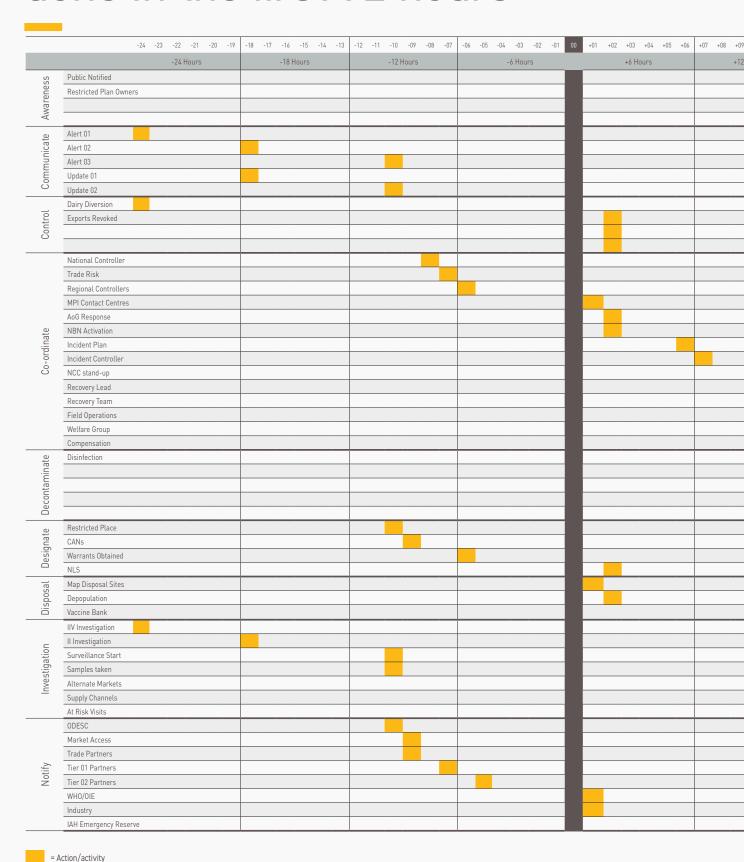
Information management and communications

ontrollers, the Intelligence, Planning and Liaison function within the response are the key means for coordinating the flow of information across and within the different response teams, work-streams and locations. The potentially complex and dynamic nature of an FMD response means the correct execution of the action planning process (used by controllers, planners and liaison officers) is essential for ensuring situational awareness and the proper integration of information from across the three work-streams (and supporting operations). The Intelligence function will be used to develop situational awareness and give the National Control Centre an understanding of how the incident can be expected to progress, allowing the development of proactive plans to mitigate, manage and eventually stamp out FMD.

Biosecurity New Zealand has developed an external communications strategy for an outbreak of FMD and other tactical communication materials. External communications will be overseen by the Public Information Management (PIM) function within the NCC, including all-of-government communications. It will be deployed using PIM team resources, as well as liaison officers from all work-streams and all co-ordination centres that have been activated.



Appendix 1: What needs to be done in the first 72 hours



+10 +11 +12	+13 +14	+15 +16			+25 +26 +27 +28 +29	+30 +31 +32 +33 +34 +	35 +36		+43 +44 +45 +46 +47 +48
Hours		+18 Hours	+24 H	ours	+30 Hours	+36 Hours		+42 Hours	+48 Hours
									_
								IV = Incusion Investigation Vet	

Note: AoG = All-of-Government; CANs = Controlled Area Notices; IAH = International Animal Health; II = Incusion Investigator; IIV = Incusion Investigation Vet; NBN = National Biosecurity Network; NCC = National Coordination Centre; NLS = National Livestock Standstill; ODESC = Officials Committee for Domestic and External Security Co-ordination; WHO/OIE = World Health Organization/World Organisation for Animal Health.

Appendix 2: How FMD affects animals

oot and Mouth Disease (FMD)¹³ is a highly contagious viral disease affecting all "cloven-hoofed" animals (a hoof divided in two), this includes: cattle, sheep, goats, camels, pigs and deer and covers both domesticated and ferral animals.

The disease causes severe production losses and while many affected animals recover, the disease often leaves them weakened and debilitated. Young animals may die, and pregnant animals can spontaneously abort their foetuses. Lactating animals are likely to experience a significant drop in milk production.

The virus that causes FMD is hardy. Strain differences and constant changes to the virus make it difficult to control. Recovered animals can be short-term carriers for the disease. Vaccination does not completely prevent infection and there is no effective treatment.

FMD-infected animals generally display signs such as blisters on and inside the mouth and feet that are extremely painful. Blisters can also occur on the teats and udders of female animals. Animals may drool, be off their feed, depressed and lame. Cattle will usually show clear clinical signs of the disease, but it may be more difficult to detect in sheep and goats.

How FMD spreads - a fast moving and highly infectious disease

The time between the arrival of the disease in New Zealand and the detection of the first case is highly influential on the size and duration of the outbreak. It is unlikely that the infected property where FMD is first detected will be the first or only infected property.

FMD can be:

- · spread directly from one animal to another by any bodily secretions including saliva, mucus, semen, milk and faeces or via carrier animals;
- · carried on contaminated objects such as animal products, soil, footwear, clothing, livestock equipment and vehicles;
- carried by wind and in water. This aerial spread has implications for New Zealand management and assurances (e.g. Cook Strait may not be a barrier to infection spread).

FMD is endemic throughout the Middle East, Africa, Asia and much of South America. More information about FMD as a disease is available via the World Organisation for Animal Health (OIE) website.14

¹³ In some jurisdictions, the disease may be called "hoof and mouth disease" to distinguish it from an unrelated human illness - hand, foot and mouth disease.

¹⁴ http://www.oie.int/animal-health-in-the-world/fmd-portal/about-fmd/diseaseinformation/





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